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Subject: General Services Administration environmental partnerships enhance Environmentally Preferred Purchasing

Acquisition Accountability

Federal acquisition, environmental stewardship, and mission accomplishment have become inseparable. Statutory and Executive Order guidance simultaneously regulate environmental accountability and acquisition procedure. Facility managers, responsible for both, are increasingly seeking consistent guidance, and reliable help.

The challenge is twofold. First, environmental accountability has recently become specific and measurable. Executive Order 13101, *Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition*[A], requires agencies to develop Strategic Plans that provide direction for procurement of recycled and environmentally preferred products, compliance assessment and evaluation, and the development and implementation of new technologies. Executive Order 13148*, Greening the Government Through Leadership in Environmental Management*[A], directs that pollution prevention be emphasized as a means to both achieve and maintain environmental compliance. Pollution resulting from facility operations is to be prevented or reduced at the source when possible. Using calendar year 2001 as a baseline, Section 205 of the Order directs each agency to reduce its use of selected toxic chemicals, hazardous substances, and pollutants by 50 percent by December 31, 2006. Toxic Release Inventory (TRI) releases are to be reduced by 10% annually, or 40% by Dec. 31, 2006. The end result is that environmental accountability will be integrated into agency day-to-day decision-making and long-term planning processes, across all agency missions, activities and functions.

It is not enough, however, to just reduce emissions. That brings us to the second part of our challenge. The method by which this reduction is achieved must meet the scrutiny of rigorous life cycle assessment and environmental cost accounting criteria. Life cycle assessment is central to the five guiding principles for Environmentally Preferred Purchasing.[1,B] These principles, published by the U. S. Environmental Protection

Agency (U. S. EPA) in August 1999 were a direct result of Executive Order 13101. They have been incorporated into the Federal Acquisition Regulation in the 48th Code of Federal Regulations (48 CFR), Subpart 23.7, "Contracting for Environmentally Preferable and Energy Efficient Products and Services".[2,C] This subpart refers to federal agency evaluation and preference for "products or services that have a lesser or reduced effect on human health and the environment when compared with competing products" as defined by Executive Order 13101.

In recent years the Department of Defense has found that optimal mission accomplishment necessitates pollution prevention. Department of Defense Instruction 4715.4 directs the services to operate using "a management approach that incorporates pollution prevention into all phases of acquisition, operations, maintenance, support and ultimate disposal of weapon systems at the installations over the system life cycle."[3,D] GSA's goal is to facilitate the DoD mission by maximizing the quality and quantity of product information available to our customer and by providing strategic procurement capability worldwide.

Meaningful Product Evaluation

Initial product evaluation and informed purchasing are critical. This is true now, more than ever before. Life cycle costs of treatment and/or disposal of waste and pollutant streams have to be compared to the life cycle costs of alternatives that eliminate or reduce toxic chemicals or pollutants at the source. So, where do we start? How do we know if we have made a "correct" decision?

This is not a simple question. U. S. EPA guidelines for product evaluation requires agencies to consider pollution prevention, life cycle analysis, degree of environmental impact, and meaningful and comparable information on the environmental performance of products. But these guidelines allow a lot of agency discretion. Answers depend on a variety of factors including practical requirements of the mission, technological feasibility of the various alternatives, current agency and/or regulatory priorities, and the availability of funds.

There are two general sources of information whereby federal agencies can obtain meaningful product attribute information. First, manufacturers themselves frequently provide environmental information (e.g., environmental claims, product profiles, etc.) about their products either on the label or through product literature. The Federal Trade Commission, in cooperation with U. S. EPA, has developed guidelines for advertisers to ensure that these environmental advertising and labeling claims (such as "environmentally preferable") comply with the law and do not mislead the consumer.[4,E]

Second, governmental and third party organizations routinely evaluate products and report their qualifications. As a specifying and procuring agency, the General Services Administration routinely categorizes hazardous commodities according to volatile organic compound, recovered material, Clean Air Act hazardous air pollutant, ozone depleting substance, heavy metal, and/or carcinogenic material content. These

commodity descriptions also declare applicable Commercial Item Description, Federal Specification, Military Specification and non-government standard compliance[5,J] as well as other relevant regulatory designations, such as “California South Coast Air Quality Management District compliant” and “Clean Air Act National Emissions Standards Compliant”. Future additional product designations will include “Bio-based”, and “U. S. EPA Significant New Alternatives Program Approved”. Product information is organized within the GSA Environmental Product and Services Guide, as well as in various informational bulletins and information matrices on the GSA Federal Supply Service environmental web page.[F]

Two of the primary third party, non-governmental certification organizations in the United States are GreenSeal®[G] and Scientific Certification Systems.[H] GreenSeal has worked with private industry, U. S. EPA, the Department of Defense, General Services Administration (GSA) and others to develop environmental certification criteria for 34 product categories, including paint, light fixtures, appliances, paper products and more. GreenSeal requirements are based on an assessment of the environmental impacts of product manufacture, use, and disposal and reflect information and advice obtained from industry, trade associations, users, government officials, environmental and other public interest organizations, and others with relevant expertise. GreenSeal awards its "seal-of-approval" to products meeting appropriate environmental standards.

Scientific Certification Systems’ “Specifications for Architectural and Anti-Corrosive Paints, SP-01” was developed as a joint effort by the National Institute of Building Sciences (NIBS), ICI Paint Corporation, the Chemical Manufacturers’ Association and Scientific Certification Systems. This criteria is based on International Organization for Standardization (ISO) Standard 14042, as prepared by Technical Committee ISO/TC 207, Environmental Management, Subcommittee SC 5, Life Cycle Assessment.

This specification was established to provide meaningful environmental impact baselines against which products can be compared. It is based not only on product characteristics, but the situation in which products are manufactured and the environment in which they are used. The specification applies to all architectural paints intended for interior or exterior use on wood, metal, masonry, drywall and other substrates. The general category "paint" includes emulsions, enamels, paints, stains, varnishes, sealers, cement-emulsion filler, and other coatings used as prime, intermediate or finish coats.

Coatings manufacturers seeking to certify their product under this SCS specification can opt to fund an independent audit of their manufacturing plant and products to determine compliance. Elements of product evaluation include adherence to applicable performance specification, product ozone formation potential, Clean Air Act compliance of the manufacturing facility, product toxicity, and compliance with Occupational Safety and Health Act (OSHA) and applicable state and Federal hazardous waste regulations. Product ozone formation potential is a rating of the potential of a product’s organic compounds to form tropospheric ozone. It is expressed as grams/liter of tropospheric ozone formed by volatile organic compound (VOC) constituents. The rating’s calculation is based upon a product’s relative molecular weight, relative reactivity in

forming tropospheric ozone and the severity of the background concentrations of tropospheric ozone of the receiving environment. In this way, products are evaluated relevant to the environment in which they are used and to other similar products instead of against fixed VOC content thresholds.

General Services Administration architectural and anti-corrosive paint, and adhesive suppliers now have the option of "certifying" their product(s) and/or manufacturing processes against either of these established "third-party" certification standards and/or specifications. Certification is not required, and the General Services Administration does not endorse any certification option over another. However, any manufacturer who becomes "certified" under one or more of the above mentioned standards/ specifications will be properly delineated for customer reference.[6,I,7,J] Full information regarding available third party certification criteria and the current status of the various suppliers that have become "certified" under one or more of these criteria is available at the GSA Hardware SuperStore web site.[K]

Product Documentation

In addition to the delineation of voluntary product attributes, end users frequently need to know how a product is regulated. In the case of the U. S. Environmental Protection Agency "Clean Air Act National Emissions Standards for Hazardous Air Pollutants for Shipbuilding and Ship Repair" (Shipbuilding NESHAP) regulation, this depends on whether the product content exceeds maximum volatile organic compound (VOC) or volatile organic hazardous air pollutant (VOHAP) content thresholds.[8,M] End users can opt to use coatings that do not exceed these thresholds in lieu of complex facility emissions control.

Within the U. S. Navy, this has become the approach to facility compliance because it is much more efficient and economical than complex emissions control. Up until recently, however, necessary product certification was not commonly available unless the end user conducted the product analysis and certification themselves.

During spring, 2000, the General Services Administration Hardware SuperStore identified a "Shipbuilding and Ship Repair" NESHAP compliance certificate template that suppliers can now use to document compliance with these U. S. EPA VOC and VOHAP thresholds. In May, this certificate was fully coordinated and approved by the U. S. Naval Sea Systems Command. Shortly thereafter, GSA began to require coatings suppliers to provide this certificate upon the purchase of the various NESHAP compliant coatings.

In completing this certificate, coatings suppliers provide information based either on known coating characteristics, or the results of conventional EPA Method 24 volatile organic compound tests. In both cases, suppliers already have this information and can provide it at no extra cost to the government.

Suppliers access the template directly from the U. S. Environmental Protection Agency "Guidebook on How to Comply with the Shipbuilding and Ship Repair (Surface Coating) Operations National Emission Standards for Hazardous Air Pollutants (EPA-453/B-97-001, January 1997 – Pages E-18, E-32 and E-33)". This is on the Internet at: http://www.epa.gov/ttn/uatw/shipb/shipguid.pdf.

Certificates are only generated once for each coating. When and if a supplier reformulates a coating, a new certificate must be generated. Completed certificates are sent by the supplier to the applicable GSA procurement officer who then forwards it to the U. S Naval Inventory Control Point, in Mechanicsburg, Pennsylvania for service-wide distribution.

Also, in addition to compliance certification, product container labels will have a short summary of that product's NESHAP compliance status, and important product information on volatile content. In this way, each facility has a second way to verify that only compliant coatings are being used.

The result of this initiative is that whenever a specialized shipbuilding coating is purchased from GSA, U. S. Navy Facility Managers in charge of that shipbuilding and ship repair operation can now contact the Naval Inventory Control Point to obtain complete and consolidated compliance documentation required by U. S. EPA. These managers thereby avoid time consuming and costly review of the regulation and the confusing determination of which coatings qualify as "NESHAP Compliant".

Driven by applicable Federal Product Description performance criteria, there are 227 national stock numbered shipbuilding coating products currently delineated "Shipbuilding NESHAPs compliant" and available within the GSA procurement system. During FY2000, nearly 23,000 of these items were sold to the federal community for nearly $2.8 million dollars.

In addition, these initiatives have made it possible for the U. S. Navy to become a model in the successful implementation of both Federal and DoD "Environmental Management System" mandates that require proactive planning and management of compliance in an economically efficient way. The initiative has been well received by the both the Naval Sea Systems Command and the various industrial activities nationwide. In addition, a similar effort is now underway with the U. S. Naval Facilities Engineering Service Center (NFESC), Naval Air Systems Command, and U. S. Air Force to develop similar "Aerospace Coating and Rework" NESHAP compliance certificates for these related industrial operations.

Procurement and Product Support

Once product evaluation is complete, the Federal Community must have a flexible and capable procurement system to achieve its goals. This is difficult with increasingly limited resources. GSA has made it possible for the federal community to select the products they need, from the suppliers they want, regardless of purchase size.

One of the primary ways GSA has been able to do this is via its "Schedules E-Library" Multiple Award Schedule (MAS).[N] The MAS is a listing of contractors that have been awarded a contract by GSA that can be used by all federal agencies. The schedule document itself provides a description of the services and products being provided and all of the ordering instructions you must follow when purchasing from MAS. Customers can expect quality brand names, commercially available items, full product and vendor variety, commercial warranties and fair and reasonable pricing. For product purchases at or below the micropurchase threshold of $2,500, federal customers can place an order directly with a contractor for the item that best meets their needs. For larger purchases, a "best value" determination is to be made in accordance with Federal Acquisition Regulation (FAR) requirement. To determine a "best value", federal customers should review product attributes for three schedule contractors. Purchase selection is then justified based on the product attribute, compliance criteria, practical mission requirements, cost, etc.

Additional suppliers can be added to the MAS at any time for the various commodities. Suppliers simply need to complete the solicitation package and submit their offer. All Schedule contract award information can be accessed via GSA's "Schedules E-Library". The E-library has a powerful search engine that allows you to identify either products or services by contractor name, contract number, special item number, or item name. Currently, the majority of all commercial products sold by GSA are on MAS. Orders can be placed directly through the manufacturer via government purchase card, or delivery order (direct billing), or they can be handled by GSA through Fedstrip/ Milstrip/ Muffin (national stock number) or Military Interdepartmental Purchase Request (MIPR).

By establishing the MAS, GSA has already synopsized the procurement, negotiated the discounts, and determined prices to be fair and reasonable for the federal community. The MAS also provides information regarding standard delivery time, what items can be expedited and what items can be delivered overnight or within two days. Orders can be placed and shipped from anywhere in the world to any destination in the world.

If a federal customer anticipates large and recurring purchases of any commodity, he or she can negotiate a blanket purchase agreement (BPA). These BPA arrangements still exist under the umbrella of the primary GSA schedule contract, but can be negotiated for better pricing, delivery terms or other conditions. These BPAs can be for as long as the schedule contract, they do not obligate funds, and there is not a minimum or maximum order size. On any purchase, all commercial warranties are also handled either by the manufacturer directly, or by calling GSA at 1-800-488-3111/ DSN 465-1416.[O]

Orders can also be placed on-line through GSA Advantage!™.[N] Customers can search by any key word likely to be in the product description such as National Stock Number, federal or military specification, commercial item description, or other unique identifier. There are currently over 600,000 items available on this system and soon, all items sold by GSA will be available. The ordering system is accessible via the Internet or via modem connection. GSA Advantage! ™ Access software is available upon request, free of charge, at 703-305-7359. In using the software, customers are then able to dial into a toll-free "1-800" modem number to access the system.

Regardless of how an item is purchased, material safety data sheets (MSDSs) are provided with every product shipment. General Services Administration also continuously inputs new MSDS information into the Department of Defense Hazardous Material Information System (HMIS) and operates a separate MSDS Request Center to facilitate customer requests. To access any GSA MSDS, simply log on to the Department of Defense HMIS system, call GSA toll free at 866-588-7659, DSN 465-5097, or submit your request via e-mail at MSDS@gsa.gov.[P,Q]

References

1. Volume 64, Federal Register, pages 45809 to 45858, Environmentally preferable purchasing for Executive agencies, August 20, 1999 (64 FR 45809-45858)

2. Federal Acquisition Regulation, 48th Code of Federal Regulations, Subpart 23.7 (48 CFR 23.7)

3. Department of Defense Directive 4715.4, Pollution Prevention, June 18, 1996, Section 4.1.2

4. Federal Trade Commission Regulation, 16th Code of Federal Regulations, Subpart 260 (16 CFR 260)

5. The U. S. Army Aberdeen Proving Ground Directorate of Safety, Health and Environment has cooperated with GreenSeal to identify those architectural and industrial maintenance paints least harmful to the environment.

6. The U. S. Naval Facilities Engineering Service Center (NFESC) recently announced that, for Architectural and Industrial Maintenance coatings related to facilities, Navy is moving from using Federal Specifications and Commercial Item Descriptions for paints and coatings to using Master Painters Institute Specifications. This is just for real property and facilities and does not yet include military applications such as weapons, munitions or weapons platforms.

7. All Navy facilities have been directed to use "Environmentally Preferred Products (EPP)" wherever practical. They define EPP for paints and coatings by the Scientific Certification Systems "Specification for Architectural and Anti-Corrosive Paints, SP-01".

8. Section 112, Clean Air Act (40th Code of Federal Regulations, Subpart 63.780 – 40 CFR 63.780) National Emissions Standards for Hazardous Air Pollutants, "Shipbuilding and Ship Repair" category.

Internet References

A. All Executive Orders: Office of Federal Environmental Executive - http://www.ofee.gov/

B. U. S. EPA Environmentally Preferred Purchasing Program, U. S. Environmental Protection Agency - http://www.epa.gov/opptintr/epp/

C. Federal Acquisition Regulation: General Services Administration - http://www.arnet.gov/far/

D. Department of Defense and Component Publications: Defense Environmental Network Information Exchange - http://www.denix.osd.mil/ *Note: For most DoD specific information, you will need a DoD login; DoD personnel and DoD contractors are authorized logins. Follow directions given under "Login help".

E. Guide to Environmentally Preferred Products: Federal Trade Commission - http://www.ftc.gov/bcp/grnrule/guides980427.htm

F. General Services Administration Environmental Products and Services: General Services Administration Federal Supply Service Environmental Page – (including Environmental Products and Services Guide): http://www.fss.gsa.gov/environ/

G. Independent, Third Party Product Certification: GreenSeal - http://www.greenseal.org/

H. Independent, Third Party Product Certification: Scientific Certification Systems – http://www.scs1.com.

I. U. S. Army Aberdeen Proving Ground Directorate of Safety, Health and Environment – http://www.apg.army.mil/ap2g/index.htm [select "preferred paints"]

J. U. S. Naval Facilities Engineering Service Center (NFESC) – http://www.nfesc.navy.mil/shore/esc63/pwtc/coatings/coatings.htm

K. General Services Administration Hardware SuperStore - http://r6.gsa.gov/fss/hac/ [select "environmental issues"]

[scroll to bottom of document - “Environmentally Preferred Product Determinations”]

L. General Services Administration Federal Supply Service web site. Hyperlinks are provided to the “Schedules E-Library” and “GSA Advantage” - http://www.fss.gsa.gov/

M. All Code of Federal Regulations, Federal Register references: National Archives and Records Administration – http://www.access.gpo.gov/nara/cfr

N. For a full description of GSA customer service, please refer to the General Services Administration Customer Assistance Guide: http://www.fss.gsa.gov/pub/

O. Hazardous Material Information System: Defense Logistics Agency - http://www.dlis.dla.mil/hmis/index.htm

P. General Services Administration Hardware SuperStore - http://r6.gsa.gov/fss/hac/ [select “MSDS request”]